

Aug. 17, 1926.

J. A. WHITTAKER

1,596,039

COMBINED LEVELING DEVICE AND ANCHOR PLATE, FOR FLOOR SLEEPERS

Filed Jan. 21, 1925

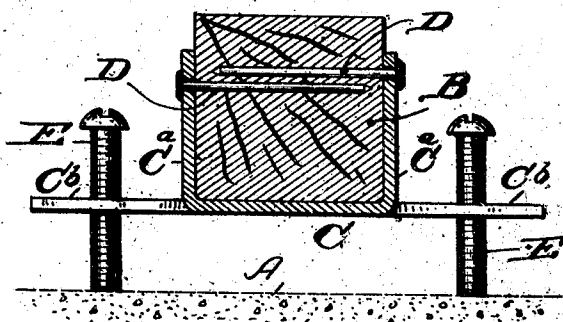


Fig. 1

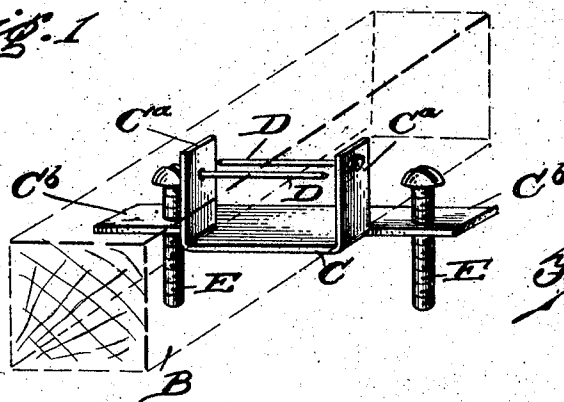


Fig. 2

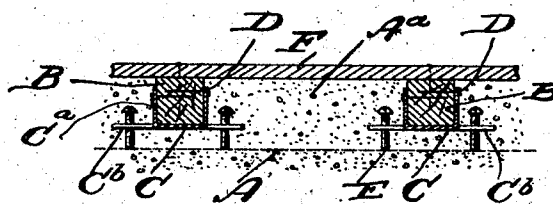
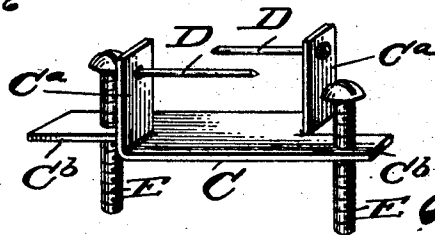


Fig. 3

Fig. 4



INVENTOR.
John A. Whittaker
BY
S. E. Thomas
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN A. WHITTAKER, OF DETROIT, MICHIGAN.

COMBINED LEVELING DEVICE AND ANCHOR PLATE FOR FLOOR SLEEPERS.

Application filed January 21, 1925. Serial No. 3,851.

My invention relates to a device for leveling and anchoring wooden floor sleepers, shown in the accompanying drawings and more particularly described in the following specification and claim.

In laying wooden flooring upon a concrete base it is essential that the floor sleepers should be properly leveled and anchored to the concrete base, that the flooring nailed thereto may be rigid and on a horizontal plane.

Heretofore it has been customary to insert shims or wedges beneath the sleepers that they may first be properly leveled upon the concrete slab before the concrete filling is poured between the sleepers to the level of the top of the latter. It has also been customary to previously insert a plurality of metal strips in the concrete bed while the latter is in a plastic condition,—the strips being inserted so that they will project above the concrete for attachment to the floor sleepers.

Both of these devices however have been found objectionable as it requires considerable time and labor to properly line up the sleepers to an even plane by driving wedges under the latter before pouring the concrete filling between them and the time thus spent represents a large proportion of the cost of building a floor of this character. So also the metal strips employed to anchor the sleepers to the concrete bed must be inserted while the latter is in a plastic state, with their ends projecting sufficiently that they may be nailed to the sleepers. To do this it becomes necessary for the workman to walk over the concrete bed while in a plastic condition to insert the strips therein, which frequently results in disturbing the concrete, and he must also go over the surface again to nail the projecting ends of the strips to the sleepers laid upon the slabs.

The purpose of the present invention therefore is to provide a device which is adapted not only to level the sleepers upon the concrete slab but which serves to anchor them thereto,—the construction being such that the sleepers may be quickly and easily leveled upon the concrete bed after the latter has hardened,—a concrete filling being subsequently poured between the sleepers, anchoring the latter rigidly to the slab.

A further object of the invention is to provide a device which is inexpensive to construct and which may be easily and

quickly secured to the sleepers and readily adjusted to bring the latter to an even plane. To this end the device has been formed of sheet metal, slit at each end to partially divide it longitudinally,—one-half of each slitted end being bent upwardly to form a U-shaped member adapted to receive the sleeper and to which its up-turned ends are nailed,—the horizontal ends of the strip being tapped to receive a pair of screws which when adjusted are adapted to raise or lower the sleeper as may be required to bring it to a horizontal plane with others simultaneously provided with a plurality of devices of like character.

In the drawings accompanying this specification:

Figure 1 is a side elevation of the device supporting a sleeper—shown in cross-section—upon a rough floor level or base.

Figure 2 is a vertical cross-sectional view through a floor sleeper—showing the concrete slab forming the rough floor level and also the concrete filling poured between the sleepers.

Figure 3 is a perspective view of the device showing a fragment of a floor sleeper in dotted lines.

Figure 4 is a perspective view of a modification of the device shown in Figure 3.

Referring now to the letters of reference placed upon the drawings:—

A denotes a rough floor level or slab of concrete.

B indicates a wooden floor sleeper and C an adjustable supporting shoe and anchor plate formed of sheet metal—the ends of which have a central longitudinal slit, whereby one-half of each end may be bent upwardly to form with the connecting horizontal portion a U-shaped or channel member. The upstanding walls C^a of the channel portion overlap the side walls of the sleeper and are secured to the latter by nails D, driven therein from opposite sides of the device.

The horizontal ends C^b of the device are tapped to receive a pair of screws or bolts E which upon adjustment serve to raise or lower the sleeper upon the rough concrete bed as may be required. When the sleepers are all properly leveled upon the concrete bed by the adjustment of the screws regulating their altitude, a concrete filling A^a is poured upon the slab between the sleepers up to a line approximating the upper sur-

face of the latter. The concrete filling when hard becomes an integral part of the rough concrete base and having embedded the several leveling devices therein—see

5 Figure 2—anchors the sleepers to the concrete base.

F denotes a wooden flooring nailed to the sleepers in the usual way.

10 In Figure 4 is shown a modification of the device in which the ends forming the side walls of the U-shaped channel are staggered. Thus the nails which secure the upturned ends to the sleeper are spaced apart while remaining on a horizontal plane to

15 each other.

In the construction shown in Figure 3 the nails attaching the device to the sides of the sleeper will have to project through its walls on different planes in order that they

20 may not interfere when driven into the sleeper from opposite sides of the device.

While this device has been described as made from a sheet metal plate slitted longitudinally at each end, with one of each

25 of the slitted ends bent upwardly to form a channel for the sleeper, the remaining horizontal end portions or fins being tapped and fitted with screws for regulating the altitude of the device,—it will be obvious

30 that it may be made of cast-metal with hori-

zontal fins integral with the channel portion and tapped for the passage of screws adapted when adjusted to regulate its altitude.

Having thus described my invention 35 what I claim is:

A device of the character described comprising a flat sheet metal plate longitudinally slitted from each end to divide said plate medially for a portion of its length, 40 with one portion of each slitted end of the plate bent at right angles to the remaining adjacent slitted portions of the plate, whereby two upstanding opposing walls are provided spaced apart to receive and overlap 45 the sides of a wooden strip, said upstanding walls being punched for the passage of nails—whereby the wooden strip may be secured thereto—the horizontal slitted end portions being on the same plane with the 50 major portion of the plate and tapped to receive adjusting screws; and a pair of adjusting screws respectively screwed through each of said horizontal slitted end portions of the plate, whereby the device may be ad- 55 justed to regulate the altitude of the wooden strip carried thereby.

In testimony whereof, I sign this specification.

JOHN A. WHITTAKER.